

Work Order ID 86266

June-26-12 12:42:06 PM

Item ID: D350-748-141TRN

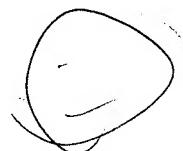
Accept

Revision ID:

Item Name: Crosstube Turning Detail

Start Date: 26/06/2012 Start Qty: 1.00

1



Required Date: 28/06/2012 Req'd Qty: 1.00

1

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/12 Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D350-748-141 | F | 0.00 | | | | | | | |

100

100

Mori Seiki

Mori Seiki CNC Lathe Large

Memo

0.00

- 1-Fill tube with sand & install plugs on both ends as per Folio FA648
- 2-Turn first side as per Folio FA648
- 3- File transition lines smooth.

FOLIO REV: AD

DWG REV: E

110

110

QC

Quality Control

QC1- Inspect dimensions to dimension sheet

0.00

Memo

0.00

KC 12-6-12
mm

KC 12-6-12
mm

WORK ORDER CHANGES

| STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
|------|------------------|----|------|-----|-------------------------------------|--------------------------|
| | | | | | | |
| | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 86266

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Item ID: D350-748-141TRN

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Stop

NS2

Start Date: 26/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 28/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

| | | | | | | | |
|------------|---------------|-------|------------|-------|-----|-------|--------------|
| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | *NR1* |
| | QC: | Date: | SPC (Y/N): | Date: | | Stop | *NR2* |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--|---|----------------------|-----------------|--------|--------------|---------------|---------------|------------------|--------------------|
| 120 *120* Mori Seiki | MORI SEIKI CNC LATHE LARGE | 0.00 | | | | 1 | 0 | | 210716 12/07/06 |
| Mori Seiki CNC Lathe Large | Memo | 0.00 | | | | 1 | 0 | | 210716 12/07/06 |
| | 1-Turn second side as per Folio FA648 2- File transition lines smooth. 3-Scribe Part & Batch as per Dwg D350-748-141 FOLIO REV: <u>AD</u> DWG REV: <u>E</u> | | | | | | | | |
| 130 *130* QC Quality Control | QC1- Inspect dimensions to dimension sheet | 0.00 | | | | 1 | 0 | | 210716 12/07/06 |
| | Memo | 0.00 | | | | 1 | 0 | | 210716 12/07/06 |
| 140 *140* QC Quality Control | QC8- Inspect parts - second check | 0.00 | DAS 03 08 | | | 12-7-23 | | | |
| | Memo | 0.00 | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|----------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 86266

June-26-12 12:42:06 PM

86266

Page 3

Item ID: D350-748-141TRN

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Stop

NS2Start Date: 26/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 28/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

| | | | | | | | |
|------------|---------------|-------|------------|-------|-----|-------|--------------|
| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | *NR1* |
| | QC: | Date: | SPC (Y/N): | Date: | | Stop | *NR2* |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|-----------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 150 *150* Crosstubes | Large Fab | 0.00 | | | | | | | |
| | Memo: | 0.00 | | | | | | | |
| | 1-DRILL HOLES FOR HEAT TREAT USING DT9806(HOLES MUST BE ALIGNED ON SAME LINE ON BOTH CUFFS) | | | | | | | | |
| | 2-Grind machining marks | | | | | | | | |
| 160 *160* Outsource | Outsource process - Heat Treat | 0.00 | | | | | | | |
| Outsource process - Heat Treat | Memo: | 0.00 | | | | | | | |
| | Issue P/O: <u>17555</u> | | | | | | | | |
| | Heat Treat to min 180 KSI As per Dwg D350-748-141 (MIL-T-6736 OR AMS 2759-1C) | | | | | | | | |
| | Sand Blast tube after Heat Treat | | | | | | | | |
| | Possible Supplier: Vac Aero | | | | | | | | |
| | Ensure Certificate of Conformity is attached | | | | | | | | |

> MO 12-7-25

12-07-27

HO

W/O: 86266

WORK ORDER CHANGES

| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
|------|------|---------------------------------|----|------|-----|-------------------------------------|--------------------------|
| | | <i>See Rule NCR 12-1980</i> | | | | | |
| | | | | | | | |

Part No: D350-748-141TRN PAR #: _____ Fault Category: RTV → NCR: Yes No DQA: *Not* Date: 12/11/02
 Resolution: _____ Disposition: Supplier → QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|----------|------|--|-----------------------------|---|----------------|---------------------------|------------------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 12-09-21 | NOD | Supplier did not sandblast on original supplier PO 17555 | U 20/9/21 | Send for sandblast to remove scale only Issue PO 17977 IMI | CZ 12/10/21 | ✓ 12/10/21 | DAS 16 0-3 12/10/21 | |
| | | | | Receive & inspect | 12/10/21 | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 86266

June-26-12 12:42:06 PM

86266

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Item ID: D350-748-141TRN

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Stop

NS2Start Date: 26/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 28/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

| | | | | | | | |
|------------|---------------|-------|------------|-------|-----|-------|--------------|
| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | *NR1* |
| | QC: | Date: | SPC (Y/N): | Date: | | Stop | *NR2* |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

170 Receive & Inspect for Damage & Mat'l Certs 0.00

170

Packaging

Packaging

Memo

180

180

QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

(DAS)
16
8-23 17/06/12

190

190

Packaging

Packaging

Packaging

0.00

Memo

0.00

Identify and stock in kanban rack
Location: LG

JX *SP*
14/5/12 *12-8-21*

TH *12-11-1*

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

Work Order ID 86266

86266

June-26-12 12:42:06 PM

Page 5

Item ID: D350-748-141TRN

Accepted

N900040100

S

up Star

NS1

Revision ID:

Item Name: Crosstube Turning Detail

Start Date: 26/06/2012 **Start Qty:** 1.00 ***1**

Cust Item ID:

Required Date: 28/06/2012 **Req'd Qty:** 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

12-10-30

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

June-26-12 12:42:10 PM

Work Order ID: 86266

Parent Item: D350-748-141TRN

Parent Item Name: Crosstube Turning Detail

86266
D350-748-141TRN

Page 1

Start Date: 26/06/2012

Start Qty: 1.00

Required Date: 28/06/2012

Required Qty: 1.00

Comments:

IPP Rev:A New Issue 08-03-06 DD verified by:ec
 IPP Rev B Removed polish 08.04.02 EC verified by : DD
 IPP Rev C Remove LPS-3 08.06.23 EC verified by DD IPP Rev C
 11.02.24 as per dwg rev.F DD verf: JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D6015-125 | | Manufactured | No | | | 110 | Each | 32.0000 | 1 | 1 | | | ** |

D6015-125

Crosstube Material

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| HALL | 32 | |
| 61380 | 4 | |
| 72511 | 28 | L |

KC 12-6-12

| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| | | |
|--|--------------|--------------|
| DART AEROSPACE LTD | Work Order: | 86266 |
| Description: Crosstube Assembly (AS350/355 High Fwd) | Part Number: | D350-748-141 |
| Inspection Dwg: D350-748-141 Rev: F | | Page 1 of 2 |

FIRST ARTICLE INSPECTION CHECKLIST

| Inspection Sheet Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|------------------------------------|-----------|------------------|---------|--------|----------------------|----------|
| SIDE A | 2.240 | +0.005/-0.000 | 2.243 | / | vern | CNC-08 |
| | 2.180 | +0.005/-0.000 | 2.184 | / | | |
| | 2.180 | +0.005/-0.000 | 2.182 | / | | |
| | 2.237 | +0.005/-0.000 | 2.240 | / | | |
| | 2.272 | +0.005/-0.000 | 2.277 | / | | |
| | 2.306 | +0.005/-0.000 | 2.313 | / | | |
| | 2.339 | +0.007/-0.000 | 2.343 | / | | |
| | 2.339 | +0.007/-0.000 | 2.344 | / | | |
| | 0.062 | +/-0.010 | .062 | / | vern | CNC-08 |
| | 4.26 | +/-0.030 | 4.26 | / | | " |
| | R0.063 | +/-0.010 | .063 | / | RG | |
| | R0.50 | +/-0.030 | .500 | / | UI | |
| | 2.240 | +0.005/-0.000 | 2.242 | / | vern | CNC-08 |
| | 2.180 | +0.005/-0.000 | 2.185 | / | | |
| | 2.180 | +0.005/-0.000 | 2.183 | / | | |
| SIDE B | 2.237 | +0.005/-0.000 | 2.240 | / | | |
| | 2.272 | +0.005/-0.000 | 2.277 | / | | |
| | 2.306 | +0.005/-0.000 | 2.311 | / | | |
| | 2.339 | +0.007/-0.000 | 2.343 | / | | |
| | 2.339 | +0.007/-0.000 | 2.344 | / | | |
| | 0.062 | +/-0.010 | .062 | / | vern | CNC-08 |
| | 4.26 | +/-0.030 | 4.26 | / | | " |
| | R0.063 | +/-0.010 | .063 | / | RG | |
| | R0.50 | +/-0.030 | .500 | / | " | |
| | 110.27 | +/-0.060 | 110.280 | / | tape | CG-02 |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

DART AEROSPACE LTD

Work Order:

8626b

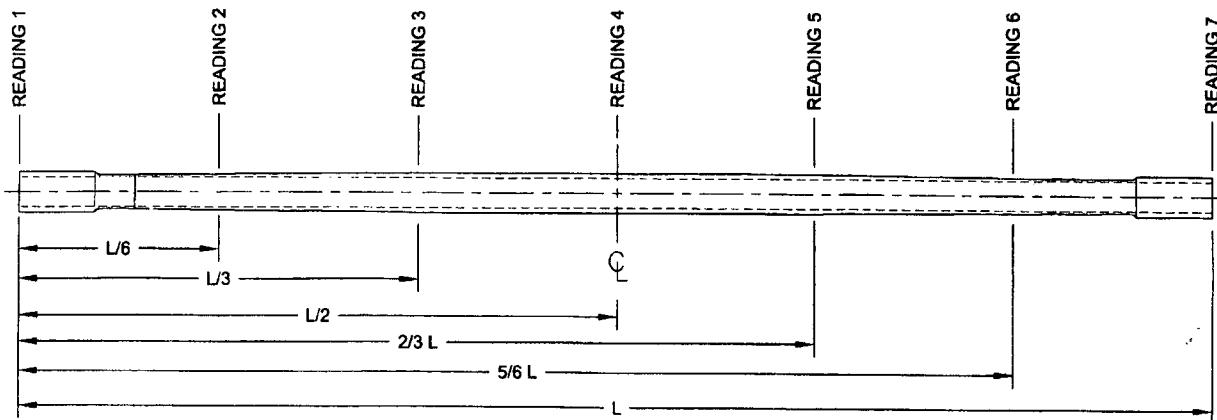
Description: Crosstube Assembly (AS350/355 High Fwd)

Part Number:

D350-748-141

Inspection Dwg: D350-748-141 Rev: F

Page 2 of 2

WALL THICKNESS MEASUREMENT

| Location | WALL THICKNESS MEASUREMENT (IN) | | | | Deviation Δw (max-min) | TOLERANCE |
|---------------------|---------------------------------|------|------|------|--------------------------------------|-----------|
| | w1 | w2 | w3 | w4 | | |
| READING 1 L= 0" | .125 | .127 | .126 | .125 | .002 | 0.030" |
| READING 2 L= 11" | .112 | .100 | .098 | .109 | .014 | |
| READING 3 L= 23" | .160 | .136 | .136 | .154 | .024 | |
| READING 4 L= 55" | .180 | .174 | .173 | .177 | .007 | |
| READING 5 L= 23" | .144 | .158 | .144 | .132 | .026 | |
| READING 6 L= 11" | .097 | .112 | .109 | .094 | .016 | |
| READING 7 L= 66" | .125 | .129 | .126 | .122 | .007 | |

Calibration Result

Actual Block Thickness: _____

Sitescan 250 Measured Thickness: _____

| | |
|--------------|----------|
| Measured by: | M.M.L |
| Date: | 12/07/11 |

| | |
|-------------|--------|
| Audited by: | |
| Date: | 12-223 |

| | |
|-----------------------|--|
| Preliminary Approval: | |
| Date: | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|--|------------|----------|
| A | 06.11.09 | New Issue (P/O D350-748-101) | KJ/JLM | |
| B | 07.10.24 | Dwg Rev updated | KJ/EC/DD | |
| C | 11.01.20 | Dwg Rev updated | KJ | |
| D | 11.07.26 | Tolerance revised for 2.339 dimensions | KJ | |
| E | 12.06.04 | Wall thickness form added | KJ | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| Item | Qty | Part Number | Description |
|------|-----|---------------|--|
| 1 | X | D350-748-141 | CROSSTUBE ASSEMBLY (AS 350/355 HI FWD) |
| 2 | 1 | D6015-125 | CROSSTUBE (OR D6017-115) |
| 3 | 2 | D3502-1 | SUPPORT |
| 4 | 2 | D2856-400-710 | ABRASION STRIP |
| 5 | 1 | AELS-1032-225 | INSERT |
| 6 | 1 | NAS1149D0363J | WASHER (OR AN960JD10) |
| 7 | 2 | MS21920-20 | CLAMP (PER DART SPEC. M-MS21920-20) |
| 8 | 1 | MS27039-1-10 | SCREW |

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6015-125 OR D6017-115
FINISHED LENGTH = 110.270±0.06
- 2) FINISH: MAGNETIC PARTICLE INSPECT PER DART QSI 038 4.2
CADMIUM PLATE PER AMS-QQ-P-416B, CLASS 1, TYPE II
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: DART PART NUMBER "D350-748-141" AND BATCH NUMBER ON INSIDE OF CUFF
PER DART QSI 044 6.4 (VIBRATING STYLUS)
- 7) WEIGHT: 30.45 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE, EXCEPT FOR Ø0.297 HOLE.
- 9) BLEND OUT ALL EDGES FROM MACHINING LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
NOTE: ALL HOLES ARE DRILLED AFTER BENDING.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 7 PASSES. MAXIMUM TUBE FLATTENING DUE TO
BENDING IS 6% BASED ON O.D.
- 11) HEAT TREAT TO MIN. 180 KSI PER MIL-T-6736 OR AMS 2759-1C AFTER TURNING. ACCEPTABLE TO
VERIFY TENSILE STRENGTH BY HARDNESS TEST PER ASTM E18 TO 40-45 HRC.
- 12) INSTALL D2856-400-710 ABRASION STRIPS WITH A GAP ON BOTTOM SIDE OF CROSSTUBE,
CENTERED OPPOSITE D3502-1 SUPPORT, PER QSI 035.
- 13) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES,
NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY.
CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE. WHEN DRILLING HOLES EXTREME CARE
MUST BE TAKEN AND CAREFUL DEBURRING PERFORMED TO ENSURE A CLEAN HOLE WITH NO
CRACKING/CHIPPING/GROOVES.
- 14) TORQUE CLAMPS 60 TO 80 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT
NUT HAS NOT BOTTOMED-OUT AFTER TORQUING
- 15) MAX TWIST AFTER BENDING: WITH XTUBE LAYED FLAT ON SURFACE, THE DIFFERENCE BETWEEN
CUFF HEIGHTS FROM THE SURFACE MAY BE NO LARGER THAN 0.25 (ZN C1-3).

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 802606 *MLJ*

12/06/12

UNDER REVIEW

11.07.12

RELEASED
2011-01-18

| | | | |
|-----------|---|---|--------------|
| F | ADD HRC TEST OPTION (B8-1) PER PAR 09-040, ADD TWIST LIMIT (A8-1, C1-3), ADD D6015-125 OPTION (C8-1), STOCK DIM NOW MACHINED (D1-4) | CP | 10.11.23 |
| E | REVISE GENERAL NOTES; UPDATE TO CURRENT ADD STANDARDS, RELOCATED FLAG #6 PER PAR 09-046 (ZN A6-3); TOLERANCES (ZN C6-3, D1-3) | RF | 09.09.30 |
| D | MAG. PARTICLE AND CAD PLATE AS MFD. | CP | 06.10.31 |
| C | ADD CAD PLATING | CP | 06.08.14 |
| B | ADD D6017-115 & PRIME AND PAINT | CP | 06.06.30 |
| A | NEW ISSUE | CP | 06.03.31 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | <i>9</i> | DART AEROSPACE LTD | |
| DRAWN | <i>9</i> | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | <i>b</i> | DRAWING NO. | REV. F |
| MFG APPR. | <i>z</i> | D350-748-141 | SHEET 1 OF 4 |
| APPROVED | <i>z</i> | TITLE | SCALE |
| DE APPR. | <i>z</i> | CROSSTUBE (AS 350/355 HI FWD) | NTS |
| DATE | 10.11.23 | COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD | |

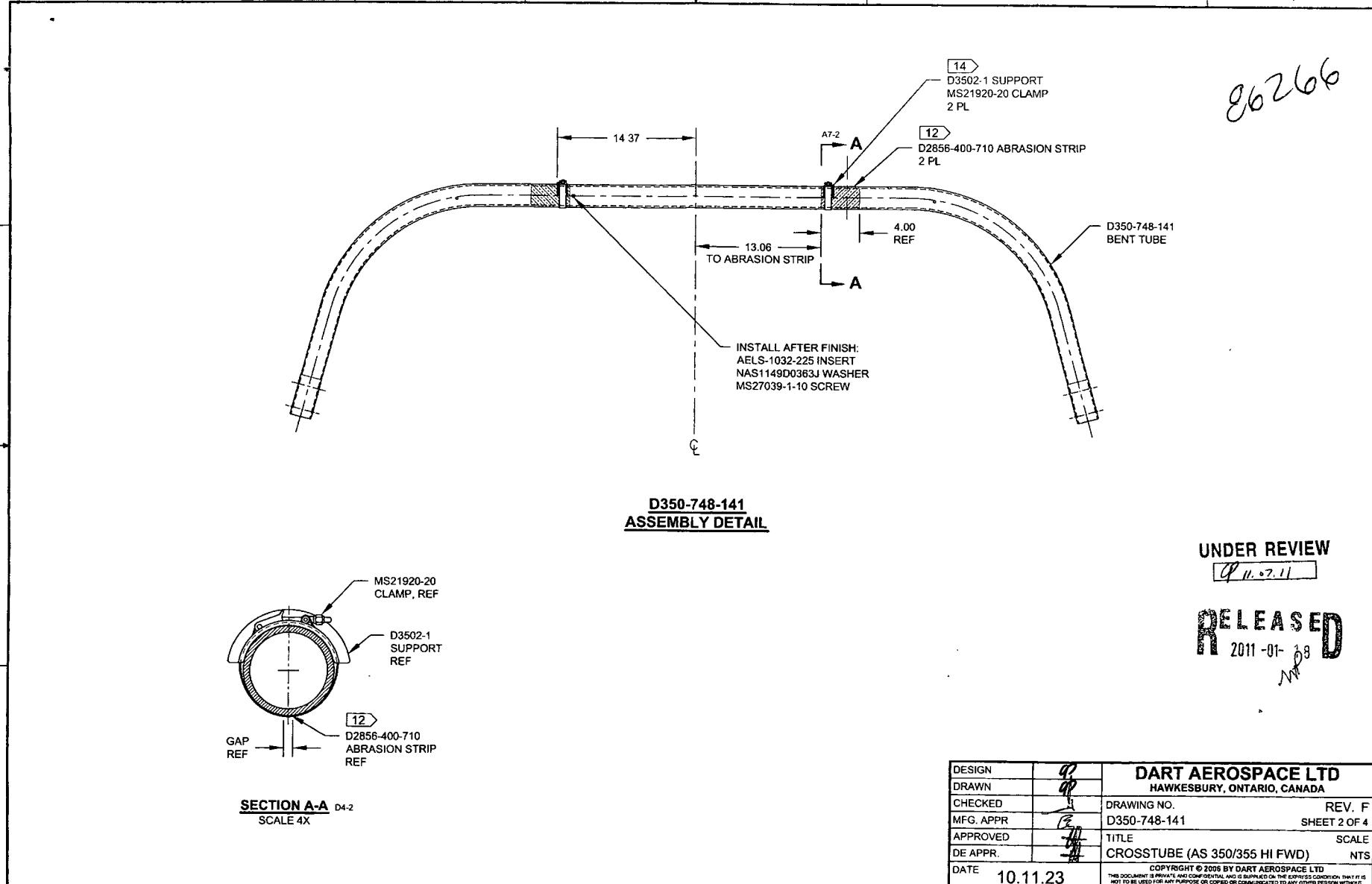
| W/O: | | WORK ORDER CHANGES | | | | | | | |
|------|------|--------------------|--|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



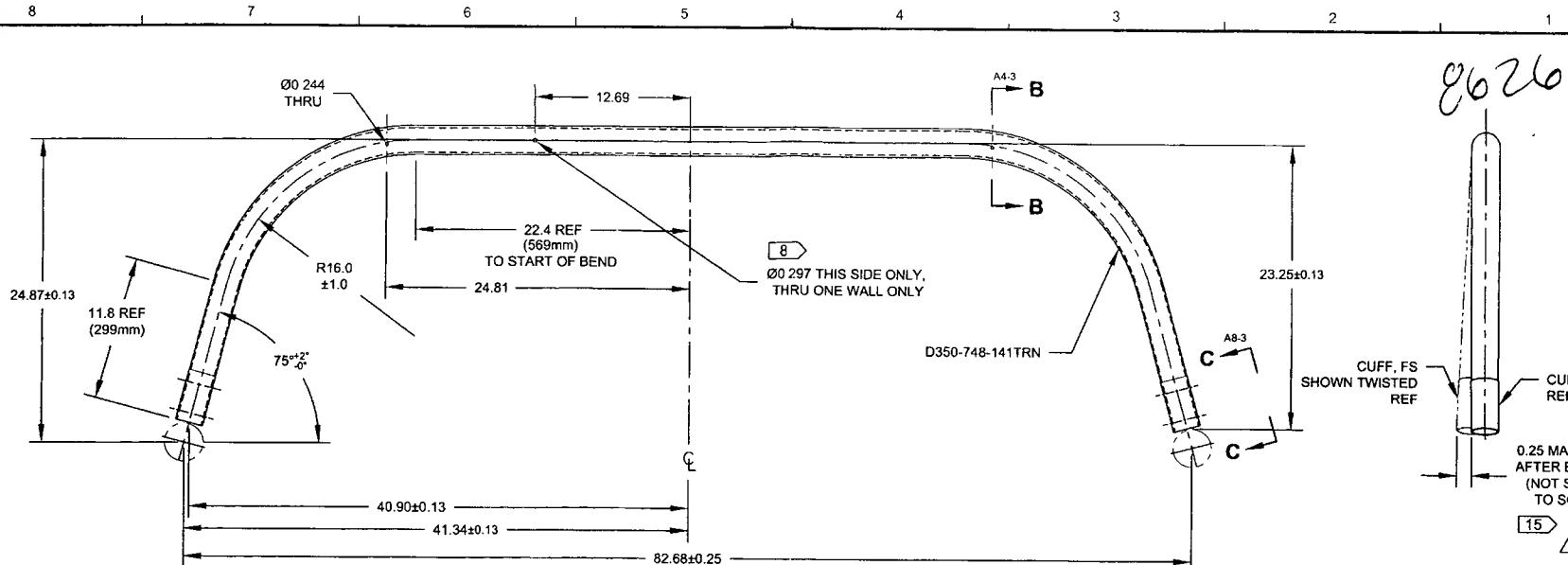
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

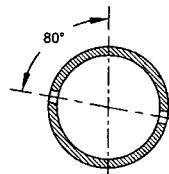
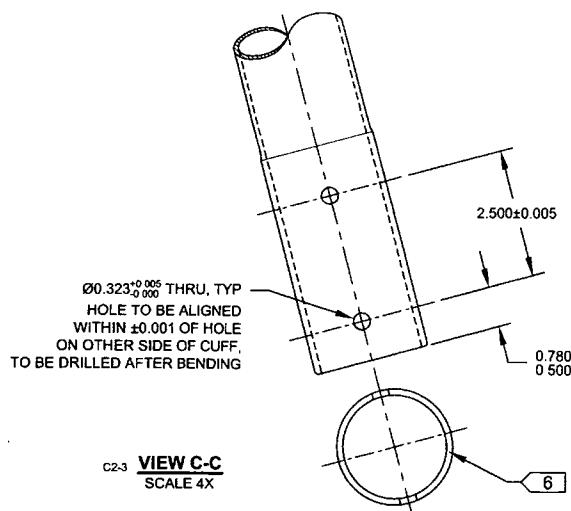
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



D350-748-141
BENDING AND DRILLING DETAIL [10]



SECTION B-B D3-3
SCALE 4X

| | | |
|------------|----------|-------------------------------|
| DESIGN | 90 | DART AEROSPACE LTD |
| DRAWN | 90 | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | B | DRAWING NO |
| MFG. APPR. | G | REV. F |
| APPROVED | H | D350-748-141 |
| DE APPR. | H | SHEET 3 OF 4 |
| DATE | 10.11.23 | TITLE |
| | | SCALE |
| | | CROSSTUBE (AS 350/355 HI FWD) |
| | | NTS |

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UNDER REVIEW
P 11-7-12

RELEASED
2011-01-18
M

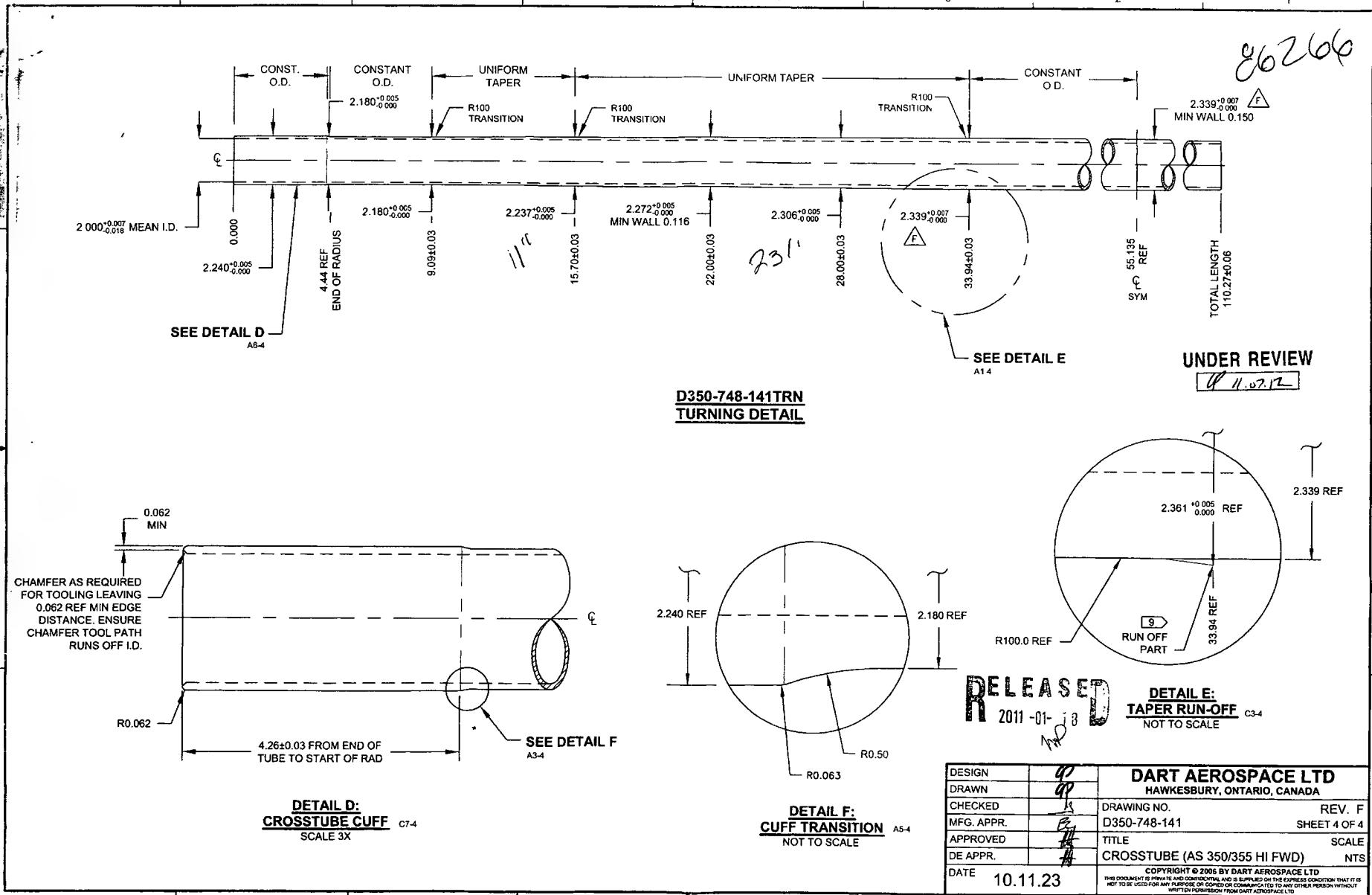
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



| | | |
|------------|----------|-----------------------------------|
| DESIGN | 90 | DART AEROSPACE LTD |
| DRAWN | 99 | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | 13 | REV. F |
| MFG. APPR. | 21 | DRAWING NO. |
| APPROVED | 11 | D350-748-141 |
| DE APPR. | 11 | SHEET 4 OF 4 |
| DATE | 10.11.23 | TITLE |
| | | CROSSTUBE (AS 350/355 HI FWD) NTS |

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WRITTEN PERMISSION FROM DART AEROSPACE LTD

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Sales Order
Aug 1.

Voice: 215-233-2600
Fax: 215-233-5653

Sold To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

| Customer ID | PO Number | Payment Terms |
|-------------|---------------|---------------|
| DARA | PO17555 | Net 30 Days |
| | Ship Via | Process |
| | R & L CARRIER | HT |

| Quantity | Item | Description | Total Shipped | This Shipr |
|-----------|-----------------|--|---------------|------------|
| 1.00 EACH | D350-748-241TRN | HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | |
| 1.00 EACH | D350-748-241TRN | SANDBLAST AFTER HT HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | |
| 1.00 EACH | D350-748-241TRN | SANDBLAST AFTER HT HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | |
| 1.00 EACH | D350-748-241TRN | SANDBLAST AFTER HT HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | |
| 1.00 EACH | D350-748-241TRN | SANDBLAST AFTER HT HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | |

COMMENTS

SHIPPED BY, SIGNATURE
METLAB

DATE

RECEIVED BY, SIGNATURE
DART AEROSPACE

DATE

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Sales Order
Aug 1,

Voice: 215-233-2600
Fax: 215-233-5653

Sold To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

| Customer ID | PO Number | Payment Terms |
|-------------|---------------|---------------|
| DARA | PO17555 | Net 30 Days |
| Ship Via | Process | |
| | R & L CARRIER | |

| Quantity | Item | Description | Total Shipped | This Shipm |
|----------|------|---|---------------|------------|
| 1.00 | EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | | |
| 1.00 | EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | | |
| 1.00 | EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | | |
| 1.00 | EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | | |
| 1.00 | EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | | |

COMMENTS

SHIPPED BY, SIGNATURE
METLAB

DATE

RECEIVED BY, SIGNATURE
DART AEROSPACE

DATE

Packing J
Sales Order No.

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038

Sales Order
Aug 1,

Voice: 215-233-2600
Fax: 215-233-5653

Sold To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:
DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

| Customer ID | PO Number | Payment Terms |
|---------------|-----------|---------------|
| DARA | PO17555 | Net 30 Days |
| Ship Via | Process | |
| R & L CARRIER | | |

| Quantity | Item | Description | Total Shipped | This Shipr |
|----------|------|------------------|---------------|------------|
| | | 250 POUNDS TOTAL | | |

COMMENTS

SHIPPED BY, SIGNATURE
METLAB

DATE

RECEIVED BY, SIGNATURE
DART AEROSPACE

DATE



1000 E. Mermaid La., Wyndmoor (Phila.) PA 19038-8093
Tel. (215) 233-2600 Fax (215) 233-5653

Invoice

Invoice Num:
0114
Invoice D
Aug 16, 20

Sold To:

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

| Customer ID | Customer PO | Payment Terms | |
|----------------|---|---------------|------------|
| DARA | PO17555 | Net 30 Days | |
| Shop Order No. | Shipping Method | Ship Date | Due Date |
| 73276 | R & L CARRIER | 8/16/12 | 9/15/12 |
| Quantity | Item | Description | Unit Price |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |
| 1 EACH | D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) SANDBLAST AFTER HT | 205.000 | 205.000 |

ANY DISCREPANCIES MUST BE REPORTED WITHIN 10 DAYS AFTER RECEIPT.

We accept AMEX, Visa & Master Card



Heat Treating and Metallurgical Consulting

| | |
|----------------------|-------|
| Subtotal | Conti |
| Shipping/Handling | Conti |
| Total Invoice Amount | Conti |
| Payment Received | Conti |
| TOTAL | Conti |

Visit our Web Site: <www.thomasregister.com/metlab/>



1000 E. Mermaid Ln., Wyndmoor (Phila.) PA 19038-8093
Tel. (215) 233-2600 Fax (215) 233-5653

Invoice

Invoice Num .
0114
Invoice C
Aug. 16, 2

Sold To:

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

Ship To:

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

| Customer ID | Customer PO | Payment Terms | |
|----------------|--|---------------|------------|
| DARA | PO17555 | Net 30 Days | |
| Shop Order No. | Shipping Method | Ship Date | Due Date |
| 73276 | R & L CARRIER | 8/16/12 | 9/15/12 |
| Quantity | Item | Description | Unit Price |
| 1 EACH | OR AMS 2759-IC) SANDBLAST AFTER HT D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | 205.000 |
| 1 EACH | SANDBLAST AFTER HT D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | 205.000 |
| 1 EACH | SANDBLAST AFTER HT D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | 205.000 |
| 1 EACH | SANDBLAST AFTER HT D350-748-241TRN HEAT TREAT TO MIN 180 KSI (MIL-T-6736 OR AMS 2759-IC) | | 205.000 |
| | SANDBLAST AFTER HT 250 POUNDS TOTAL | | 20 |

ANY DISCREPANCIES MUST BE REPORTED WITHIN 10 DAYS AFTER RECEIPT.

We accept AMEX, Visa & Master Card



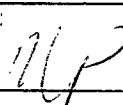
Heat Treating and Metallurgical Consulting

| | |
|----------------------|-------------|
| Subtotal | 2,05 |
| Shipping/Handling | |
| Total Invoice Amount | 2,05 |
| Payment Received | |
| TOTAL | 2,05 |

Visit our Web Site: <www.thomasregister.com/metlab/>

North American Free Trade Agreement
Certificate of Origin

Please print or type

| | | | | | | |
|--|----------------------------|---|--------------------------|----------------------|-------------|-----------------------|
| 1. Exporter's Name and Address: Metlab 1000 E. Mermaid Lane Wyndmoor, PA 19038 | | 2. Blanket Period: (dd/mm/yyyy) From: 01/01/2012 To: 31/12/2012 | | | | |
| | | Tax Identification Number: 23-2973306 | | | | |
| 3. Producer's Name and Address: Metlab 1000 E. Mermaid Lane Wyndmoor, PA 19038 | | 4. Importer's Name and Address: Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA | | | | |
| | | Tax Identification Number: | | | | |
| 5. Description of Good(s) | | 6. HS Tariff Classification Number | 7. Preference Criterion | 8. Producer | 9. Net Cost | 10. Country of Origin |
| Heat Treatment Services | | 8483.401 | C | Yes | No | USA |
| 11. I CERTIFY THAT: | | | | | | |
| <ul style="list-style-type: none"> * the information on this document is true and accurate and I assume the responsibility for proving such representations. I understand that I am liable for any false statements or material omissions made on or in connection with this document; * I agree to maintain, and present upon request, documentation necessary to support this Certificate, and to inform, in writing, all persons to whom the Certificate was given of any changes that would affect the accuracy or validity of this Certificate; * the goods originated in the territory of one or more of the Parties, and comply with the origin requirements specified for those goods in the North American Free Trade Agreement, and unless specifically exempted in Article 411 or Annex 401, there has been no further production or any other operation outside the territories of the Parties; and * this Certificate consists of <u>One (1)</u> page, including all attachments. | | | | | | |
| Authorized Signature:  | | | Company: Metlab | | | |
| Name: Mark Podob | | | Title: Vice President | | | |
| Date: (mm/dd/yyyy) 8/16/2012 | Telephone: 215-233-2600 | | | Fax: 215-233-5653 | | |



1000 E. Mermaid Ln., Wyndmoor (Phila.) PA 19038-8093
Tel. (215) 233-2600 Fax (215) 233-5653

ORDER ACKNOWLEDGEMENT

613632/053

FAXED TO: _____

Rev A 5/10/10

QF-4.7.2.2-01

E-MAILED TO: _____

| | |
|--|--|
| CUSTOMER: <i>Dart</i> | PO NUMBER: <i>P017555</i> |
| DATE MATERIAL RECEIVED: <i>8/1/2012</i> | METLAB QUOTE NUMBER: <i>N/A</i> Or, MINIMUM STD ORDER(CHECK) |
| ESTIMATED SHIP DATE: <i>8/15/12</i> | METLAB S.O. NUMBER: <i>173277</i> |

THANK YOU FOR YOUR ORDER. WE WILL MAKE OUR BEST EFFORT TO SHIP YOUR ORDER ON OR BEFORE THE ESTIMATED SHIP DATE SHOWN ABOVE. IF YOU NEED TO CONTACT US REGARDING THIS ORDER, PLEASE REFERENCE THE METLAB S.O. NUMBER SHOWN ABOVE.

| | |
|---|--|
| QUOTATION MISSING? <input checked="" type="checkbox"/> | OK TO PROCESS WITHOUT <i>DA</i> |
| PURCHASE ORDER MISSING? <input type="checkbox"/> | OK TO START PROCESSING WITHOUT _____ |
| NOTE THAT WE NEED THE FOLLOWING INFORMATION IN ORDER TO COMPLETE YOUR ORDER AND TO MEET THE PROMISED SHIP DATE: | |
| TECHNICAL INFORMATION REQUIRED(LIST) : _____ | ON HOLD : YES <input type="checkbox"/> NO <input type="checkbox"/> |
| OTHER INFORMATION OR CLARIFICATION: _____ | ON HOLD : YES <input type="checkbox"/> NO <input type="checkbox"/> |
| RELEASED FOR PROCESSING BY: <i>Da</i> | DATE: <i>8/8/12</i> |

ACKNOWLEDGED BY:

TODAY'S DATE: _____

SHIPPED DATE: _____

THIS ORDER IS ACKNOWLEDGED WITH THE UNDERSTANDING THAT THE ABOVE PURCHASE ORDER IS IN ACCORDANCE WITH METLAB'S TERMS AND CONDITIONS OF SALE AS SUBMITTED AT THE TIME OF THE ABOVE QUOTATION.

OTT 1983132 0



NIR R-500048-5



STRAIGHT BILL OF LADING - 1.866.DAY.ROSS

| | | | | | | | | |
|--|---|--|--|---|--|---|---|---|
| DATE MONTH DAY YEAR | | | LEVEL OF SERVICE <input type="checkbox"/> GENERAL | C.O.D AMOUNT _____ CURRENCY: <input type="checkbox"/> CDN <input type="checkbox"/> U.S. | Pick Up Information Telephone Number: _____ Contact Name: _____ Ready Date & Time: _____ Closing Time: _____ | | | |
| <input type="checkbox"/> PRIVATE RESIDENCE PICK UP <input type="checkbox"/> PRIVATE RESIDENCE DELIVERY <input type="checkbox"/> PALLETS BEING RETURNED <input type="checkbox"/> HAZARDOUS GOODS* <input type="checkbox"/> APPOINTMENT DELIVERY(DATE/TIME) _____ | | | <input type="checkbox"/> TAILGATE PICK UP <input type="checkbox"/> HEATED SERVICE <input type="checkbox"/> TRADE SHOW PU <input type="checkbox"/> INBOND | <input type="checkbox"/> TAILGATE DELIVERY <input type="checkbox"/> TEMPERATURE CONTROL(TL ONLY) <input type="checkbox"/> TRADE SHOW DELIVERY | <input type="checkbox"/> SHIPPER EMAIL: _____ | <input type="checkbox"/> CONSIGNEE CITY: _____ PROV.: _____ COUNTRY: _____ POSTAL CODE: _____ | <input type="checkbox"/> BILL TO CITY: _____ PROV.: _____ COUNTRY: _____ POSTAL CODE: _____ | <input type="checkbox"/> THIRD CITY: _____ PROV.: _____ COUNTRY: _____ POSTAL CODE: _____ |
| <small>*this shipment contains dangerous goods as set out in the attached shipper's declaration</small> | | | | | | | | |
| SHIPPER DAY & ROSS ACCT. NO. <u>038326</u> TEL NO. <u>6136325200</u> SHIPPER'S NAME _____ | | | CONSIGNEE DAY & ROSS ACCT. NO. <u>215233</u> CONSIGNEE'S NAME <u>Mark Podob</u> DELIVERY ADDRESS <u>MettLab</u> <u>1000 E. Mermaid Jan</u> <u>WYNDMOOR PA</u> CITY: _____ PROV.: _____ COUNTRY: _____ POSTAL CODE: _____ | | | | | |
| CITY: <u>Hawkesbury</u> PROV.: <u>ON</u> COUNTRY: <u>CA</u> POSTAL CODE: <u>KUA1K7</u> | | | | | | | | |
| METHOD OF PAYMENT <input checked="" type="checkbox"/> PREPAID <input type="checkbox"/> CASH IN ADVANCE AMOUNT _____ CURRENCY: <input type="checkbox"/> CDN <input type="checkbox"/> THIRD PARTY BILL TO ACCOUNT NUMBER _____ <input type="checkbox"/> VISA <input type="checkbox"/> M.C. <input type="checkbox"/> AMX EXPIRY DATE _____ CARD NO. _____ | | | OTHER BILL TO PARTICULARS BILL TO: _____ BILL TO ADDRESS: _____ GST: _____ CITY: _____ PROV.: _____ COUNTRY: _____ POSTAL CODE: _____ | | | | | |
| SPOT QUOTE NO. _____ | | | ROUTING OR SPECIAL INSTRUCTIONS _____ <small>MAXIMUM LIABILITY OF \$2.00/LB OR \$4.41/KG COMPUTED ON THE TOTAL ACTUAL WEIGHT UNLESS DECLARED VALUATION STATES OTHERWISE. PLEASE SEE ADDITIONAL TERMS AND CONDITIONS ON REVERSE.</small> | | | | | |
| NO. OF PCS. | DESCRIPTION OF ARTICLES AND SPECIAL MARKS | | | | WEIGHT <input checked="" type="checkbox"/> LBS <input type="checkbox"/> KGS | DECLARED VALUE <input type="checkbox"/> CDN. <input type="checkbox"/> U.S. | DIMENSIONS | |
| 5 | cardboard cartons | | | | 2.50 | | 126x13x7 | |
| ALL USED HOUSEHOLD GOODS AND PERSONAL EFFECTS SHIPPED AT SHIPPER'S RISK OF DAMAGE | | | | | | | | |

The uniform TERMS OF CARRIAGE apply to this BILL OF LADING. (See Term and Condition No. 1)

NOTICE OF CLAIM must be submitted in writing within sixty (60) days of delivery. (See Term and Condition No. 2)

The carrier's maximum liability is limited by the TERM CONDITIONS of the Bill of Lading. (See Term and Condition No. 5)

SHIPPER'S REF. NO.

PO 1755

PICK-UP DATE

07-27-2012

NO. OF PCS.

SHIPPER'S SIGNATURE

Bugillo Alba

DAY & ROSS DRIVER

Denis

PURCHASE ORDER

PRINT

BRIGITTE Golder

POWER NO.

270604

TRAILER NO.

011 55N1275



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17555

Purchase Order Date 7/27/2012

PO Print Date 7/27/2012

Page Number 1 of 3

Order From : VU-MET001
METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038
USA

| | | | |
|--------------------|--------------|-----------------|---------------------|
| Contact Name | | Buyer | |
| Vendor Phone | 215-233-2600 | Requisition Nbr | Brigitte Golden |
| Vendor Fax | 215-233-5653 | Tax Resale Nbr | 10127-2607 |
| Vendor Account Nbr | | Terms | Net 30 |
| | | Currency | USD |
| | | FOB | Destination-Collect |

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PO Instructions: CROSSTUBE WILL BE LEAVING THIS AFTERNOON WITH DAY&ROSS TRACKING # OTT19831320 No substitution or deviation without

Change Nbr: 1

Change Date: 7/27/2012



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17555

Purchase Order Date 7/27/2012

PO Print Date 7/27/2012

Page Number 3 of 3

Order From : VU-MET001

METLAB
1000 E. MERMAID LANE
WYNDMOOR, PA 19038
USA

| | | |
|--------------------|-----------------|---------------------|
| Contact Name | Buyer | Brigitte Golden |
| Vendor Phone | Requisition Nbr | |
| Vendor Fax | Tax Resale Nbr | 10127-2607 |
| Vendor Account Nbr | Terms | Net 30 |
| | Currency | USD |
| | FOB | Destination-Collect |

Special Inst: SAME AS ABOVE

PO Total:

\$2,050.0

PO Instructions: CROSSTUBE WILL BE LEAVING THIS AFTERNOON WITH DAY&ROSS TRACKING #
OTT19831320

Change Nbr: 1

Change Date: 7/27/2012

No substitution or deviation without consent.

Certificate of Conformity or Material Certification required - YES NO

Brigitte Golden

From: Mark Podob <mpdob@metlabheatreat.com>
Sent: Friday, July 27, 2012 11:21 AM
To: Dan Krackovic; Doris Funches; Eugene Roberts
Cc: Brigitte Golden
Subject: FW: PO17555 from Dart
Attachments: PO17555 METLAB.pdf

New P.O. from Dart Aerospace attached.
Thanks.

Mark Podob
Vice President, Marketing and Sales
Metlab
1000 E. Mermaid Lane
Wyndmoor, PA 19038
215-233-2600 Ext. 232
(F) 215-233-5653
mpdob@metlabheatreat.com

This message and any attachments are intended for the individual or entity named above. If you are not the intended recipient, please do not forward, copy, print, use or disclose this communication to others; also please notify the sender replying to this message and then delete it from your system.

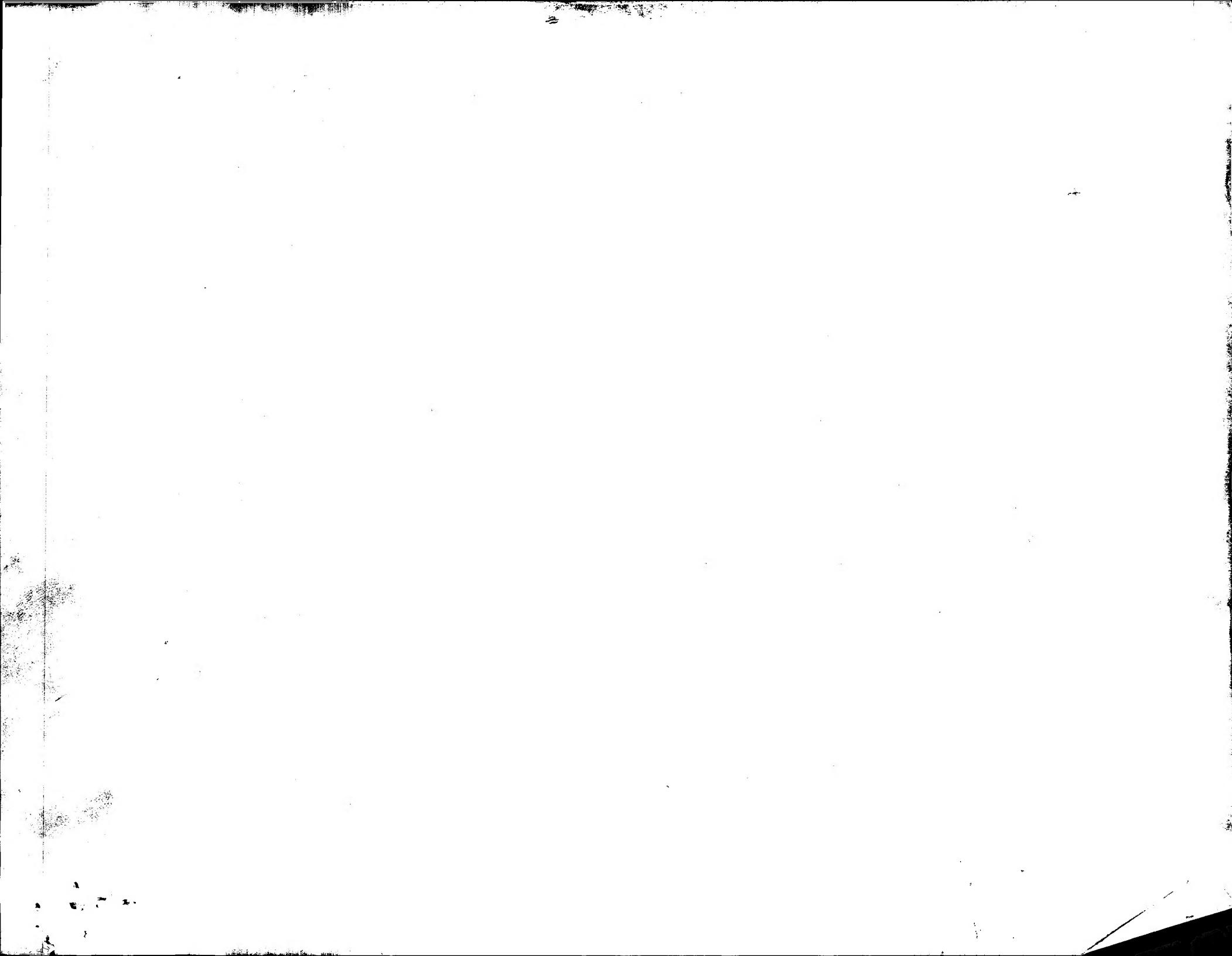
From: Brigitte Golden [<mailto:bgolden@dartaero.com>]
Sent: Friday, July 27, 2012 11:19 AM
To: Mark Podob
Cc: 'Linda Lacelle'
Subject: PO17555 from Dart

Please find attached the PO
Thank You

From: Linda Lacelle [<mailto:llacelle@dartaero.com>]
Sent: Thursday, July 26, 2012 2:36 PM
To: mpdob@metlabheatreat.com
Cc: Brigitte Golden
Subject: more tubes

Hi Mark,
We will be shipping out 9 tubes tomorrow for heat treat. Another batch should follow end of next week. As always, I need these asap..
Thx!

Linda Lacelle
Production manager
Dart Aerospace



Packing Slip

Manufacturing Inc.

772 MAIN STREET E., P.O. BOX 3,
HAWKESBURY, ONTARIO K6A 2R4

TEL: (613) 632-0921
FAX: (613) 632-2681

| Date | Page |
|-----------------|------|
| Sep 24, 2012 | 1 |
| Shipment Number | |
| SH005312 | |

Sold To:

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

Ship To:

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

| Line Item | PO Number | Customer No. | Order No. | Ship Via | Order Date |
|-----------|-----------|--------------|-----------|----------|--------------------|
| -0 | 17979 | DAR100 | OR005146 | | September 24, 2012 |

| Item Number | Description | Qty. Ordered | UOM | Qty. Shipped | Qty. Backord. |
|-------------|------------------------------------|--------------|-----|--------------|---------------|
| MS-1200-1 | DART AEROSPACE - SANDBLAST 9 PIPES | 9.00 | EA | 9.00 | 0.00 |

Comments:

Total weight:

Packaged:

Total packages:

*** THANK YOU FOR YOUR BUSINESS ***